

APPENDIX A
"CLEAN" VERSION OF EACH PARAGRAPH/SECTION/CLAIM
37 C.F.R. § 1.121(b)(ii) AND (c)(i)

CLAIMS (with indication of amended or new):

D1 1. (Twice Amended) A trench-type power MOSFET having a vertical invertible channel composed of N type conductivity material and disposed between a source region and a drain region; a gate oxide and gate contact thereon extending along the length of said invertible channel and operable to invert the conductivity type of said invertible channel; said gate contact containing a P type conductivity material; said vertical invertible channel material having a constant concentration along its full length.

D2 3. (Amended) The power MOSFET of claim 1 wherein said invertible channel material is epitaxially deposited silicon.

Sub E17
D3 4. (Twice Amended) A power MOSFET comprising, in combination; a P type substrate; an epitaxially deposited N type layer deposited atop said substrate and having a substantially constant concentration; a plurality of spaced trenches having vertical walls extending through said epitaxial layer; a thin gate oxide on said vertical walls and conductive P type polysilicon deposited into said trenches to define a polysilicon gate; a P type source region formed adjacent the walls of each of said trenches and diffused into the top of said epitaxial layer; a source contact connected to at least said source regions; a drain contact connected to said substrate; whereby said MOSFET has a reduced on resistance.

D4 5 9. (Twice Amended) A power MOSFET having reduced on resistance comprising, in combination; a P type conductivity substrate; an epitaxially deposited N type conductivity layer deposited atop said P type substrate to form an epitaxial layer having a substantially constant concentration throughout its volume; a plurality of spaced trenches having vertical walls extending through said epitaxial layer; a thin gate oxide on said vertical walls and conductive polysilicon with a P type conductivity deposited into said trenches to define a polysilicon gate; a P type concentration source region formed adjacent the walls of each of said trenches and diffused into the top of said epitaxial layer; a source contact connected to at least said source regions; and a drain contact connected to said substrate.

D5

20. (Amended) A trench-type power MOSFET according to claim 1, further having highly doped contact regions at a top portion of said vertical invertible channel.